

## ***SPEAKER CONTACT SHEET – Greenhouse and Ornamental Applicators CIC 2023***

### **Pesticide Applicator Testing Information**

- a. Applicator Licensing and Certification - <https://iowaagriculture.gov/pesticide-bureau/applicator-licensing-certification>
  
1. **Personal Protective Equipment: Back to Basics** – Evan Alderman, M.S., Co-Coordinator/Extension Specialist, Pesticide Safety Education Program, Iowa State University Extension and Outreach, [alderman@iastate.edu](mailto:alderman@iastate.edu); and Carolyn Sheridan, RN, BSN, Founder and Executive Director, Ag Health & Safety Alliance, [carolyn@aghealthandsafety.com](mailto:carolyn@aghealthandsafety.com).
  - a. Ag Health & Safety Alliance - <https://aghealthandsafety.com/>
  - b. Personal Protective Equipment - <https://pesticidestewardship.org/personal-protective-equipment/>
  - c. The Label and PPE - <https://pesticidestewardship.org/personal-protective-equipment/the-label-and-personal-protective-equipment/>
  - d. Components of PPE - <https://pesticidestewardship.org/personal-protective-equipment/components-of-personal-protective-equipment/>
  - e. Cleaning, Maintenance, Storage, and Disposal - <https://pesticidestewardship.org/personal-protective-equipment/cleaning-maintenance-storage-and-disposal/>
  
2. **Pesticide Storage and Security: 3 Keys to Success** – Evan Alderman, M.S., Co-Coordinator/Extension Specialist, Pesticide Safety Education Program, Iowa State University Extension and Outreach, [alderman@iastate.edu](mailto:alderman@iastate.edu).
  - a. Storage Building and Location - <https://pesticidestewardship.org/storage/storage-building-location/>
  - b. Storage Conditions - <https://pesticidestewardship.org/storage/storage-conditions/>
  - c. Storage Safety and Security - <https://pesticidestewardship.org/storage/safety-and-security/>
  - d. Storage of Pesticides - <http://npic.orst.edu/health/storage.html>
  - e. Temperature Effects on Storage - <https://extension.missouri.edu/publications/ipm1012>
  - f. Is This Pesticide on My Shelf Still Good? - [https://edustore.purdue.edu/item.asp?Item\\_Number=PPP-142](https://edustore.purdue.edu/item.asp?Item_Number=PPP-142)
  
3. **Plant Problems in the Greenhouse: Tips and Tricks for Identifying and Tracking Plant Problems** – Chelsea Harbach, PhD., Plant Disease Diagnostician, Plant and Insect Diagnostic Clinic, Iowa State University, [charbach@iastate.edu](mailto:charbach@iastate.edu).
  - a. The Basics of Diagnosing Greenhouse Floriculture Problems - [https://www.canr.msu.edu/news/the\\_basics\\_of\\_diagnosing\\_greenhouse\\_floriculture\\_problems](https://www.canr.msu.edu/news/the_basics_of_diagnosing_greenhouse_floriculture_problems)
  - b. Diagnosing Plant Diseases of Floriculture Crops - <https://ag.umass.edu/greenhouse-floriculture/fact-sheets/diagnosing-plant-diseases-of-floricultural-crops>
  - c. Diagnosing a Plant Problem 101 - <https://extension.psu.edu/diagnosing-a-plant-problem-101>
  - d. Common Abiotic and Biotic Problems Encountered in Indoor-Grown Seedlings and Transplants - <https://extension.wvu.edu/lawn-gardening-pests/gardening/garden-management/common-problems-in-seedlings-and-transplants>

4. **Clean Up Your Game: A Greenhouse Sanitation Review** – Ryan Krull, M.S., IPM Program Manager, Corteva Agriscience, [ryan.krull@corteva.com](mailto:ryan.krull@corteva.com).
  - a. Ryan's Tips for Good Greenhouse Sanitation Practices:
    - i. Clean up and contain all plant substrate and debris.
    - ii. Remove standing water from surfaces to help reduce algae, moss, and other pest pressures.
    - iii. Reduce algae buildup on evaporative cooling pads.
    - iv. Store your watering wands appropriately and ensure wands/tools are clean.
    - v. Remove dead or undesirable plants from the production area.
    - vi. Use a foot bath to reduce the potential spread of pests from one area to another.
    - vii. Identify and remove any weeds in the greenhouse.
    - viii. Cleanout and sanitize any pots before they are reused in production.
    - ix. After production, clean and sanitize the greenhouse. Take time to check for maintenance issues.
    - x. Remove and control weeds surrounding your greenhouse.
      1. Greenhouse Sanitation - <http://plantpathology.ca.uky.edu/files/ppfs-gh-04.pdf>
      2. Cleaning and Disinfecting the Greenhouse - <https://ag.umass.edu/greenhouse-floriculture/fact-sheets/cleaning-disinfecting-greenhouse>
      3. Keeping Clean - <https://www.greenhousemag.com/article/gm1114-greenhouse-sanitation-techniques/>
  
5. **Alternatives to Neonicotinoid Insecticides in the Greenhouse** – Raymond Cloyd, PhD., Professor and Extension Entomologist, Department of Entomology, Kansas State University, [rcloyd@ksu.edu](mailto:rcloyd@ksu.edu).
  - a. **If you would like a copy of Raymond's presentation, please email Evan @ [alderman@iastate.edu](mailto:alderman@iastate.edu) and he will send it to you.**
  - b. Resistance Management: Resistance, Mode of Action, and Pesticide Rotation - <https://bookstore.ksre.ksu.edu/pubs/MF2905.pdf>
  - c. Resistance Management of Arthropod Pests in Greenhouse Production Systems - <https://bookstore.ksre.ksu.edu/pubs/MF3564.pdf>
  - d. Greenhouse Insect Management Without Neonicotinoids - [https://www.canr.msu.edu/news/greenhouse\\_insect\\_management\\_without\\_neonicotinoids](https://www.canr.msu.edu/news/greenhouse_insect_management_without_neonicotinoids)